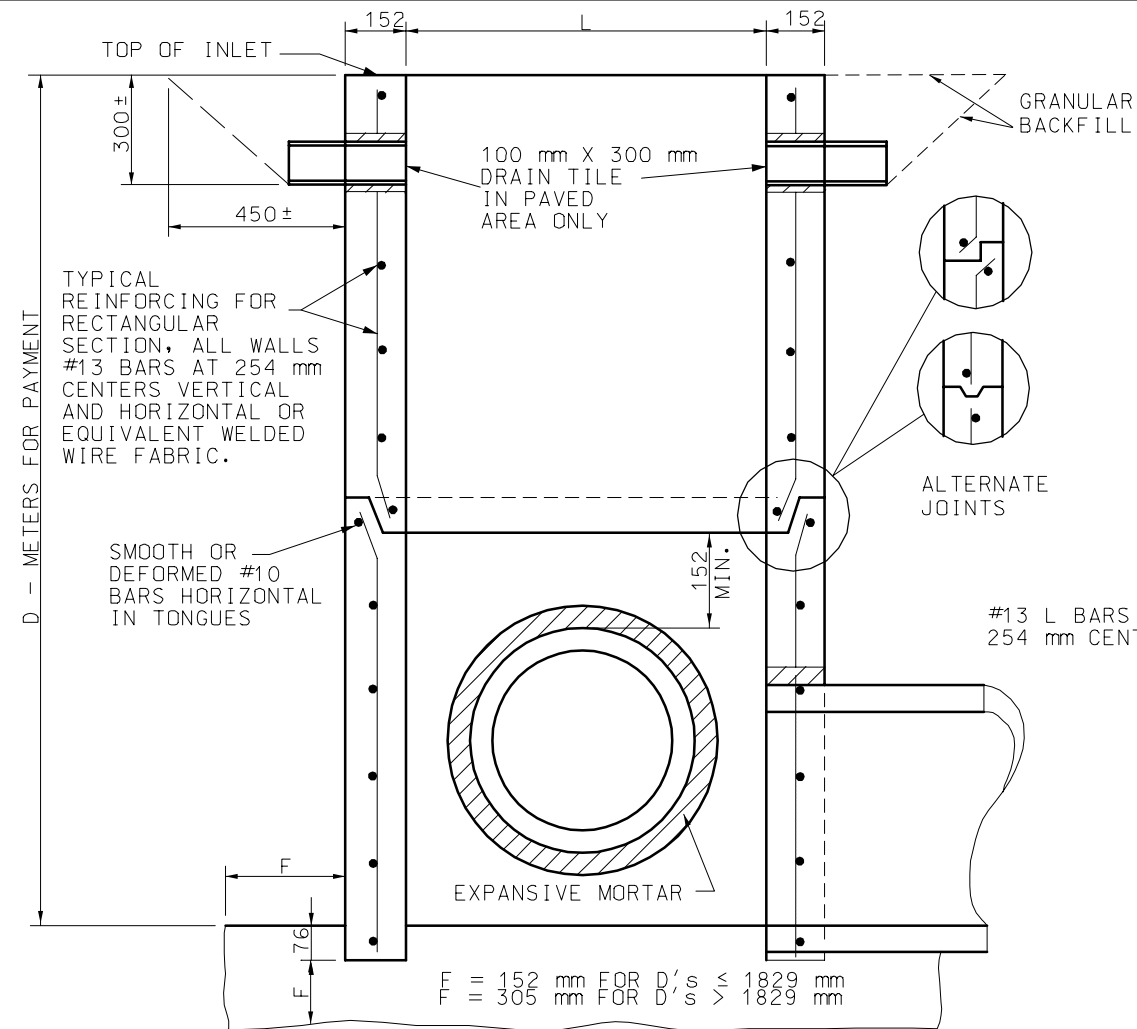
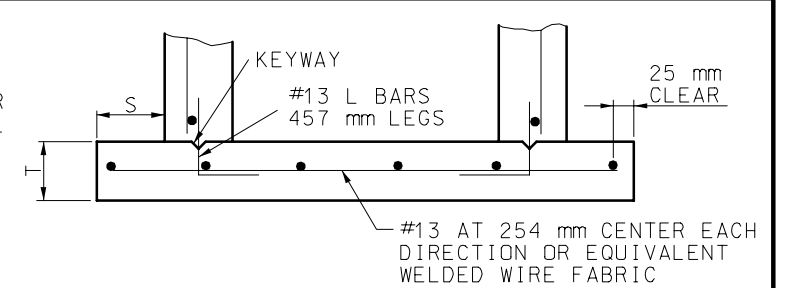


SECTION A-A



SECTION B-B

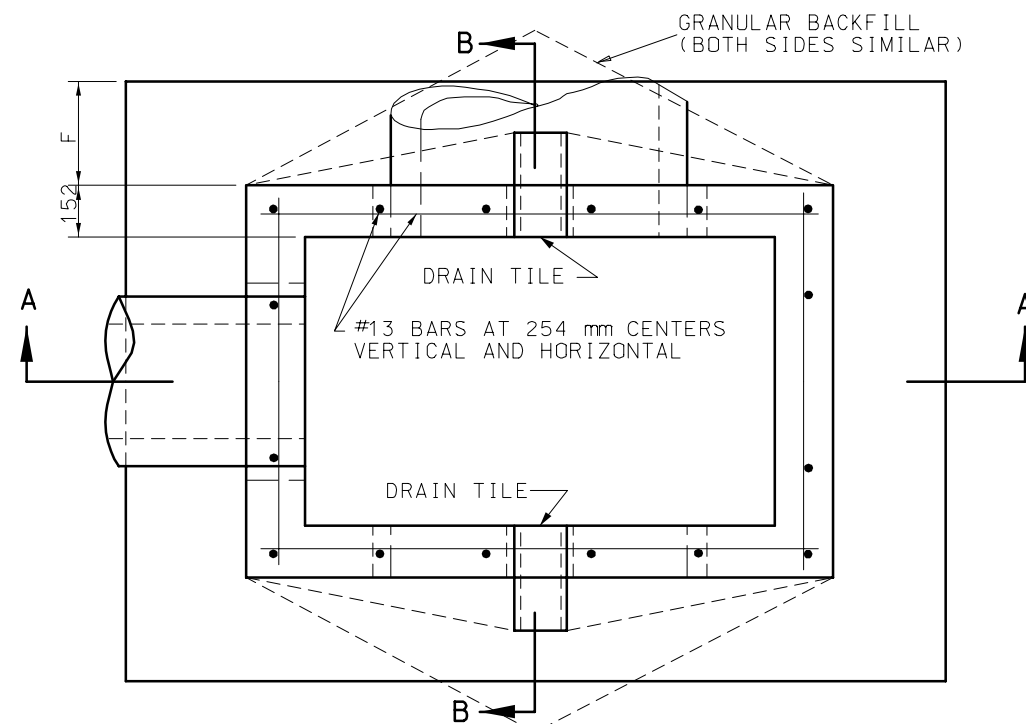


SECTION C-C

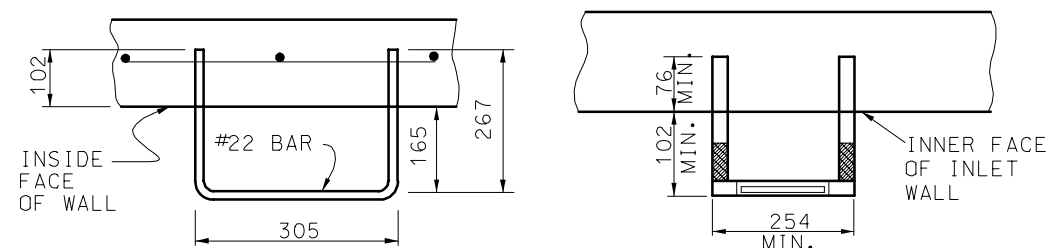
S = 0 FOR D ≤ 1829 mm AND 229 mm  
FOR D > 1829 mm,  
T = 152 mm FOR D ≤ 1829 mm AND 229 mm  
FOR D > 1829 mm.

FOUNDATION SLAB AND BASE SECTION MAY BE POURED MONOLITHIC OR SEPARATELY WITH A KEYWAY.

## PRECAST FOUNDATION SLAB

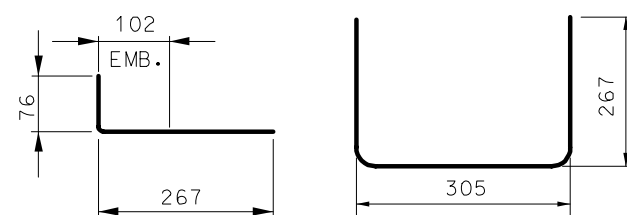


INLET PLAN



STEPS

STEP INSTALLATION  
(OTHER THAN STEEL BAR)



BENDING DIAGRAM  
STEEL STEP BAR

STEPS SHALL BE PLACED AT VERTICAL INTERVALS OF 406 mm MAXIMUM IN ALL INLETS HAVING DEPTH OF MORE THAN 1219 mm. STEPS SHALL BEGIN AT AN ELEVATION 152 mm ABOVE THE TOP OF THE OUTLET PIPE.

STEPS SHALL BE SET LEVEL AND IN VERTICAL ALIGNMENT AND NOT NEARER THAT 76 mm TO A JOINT.

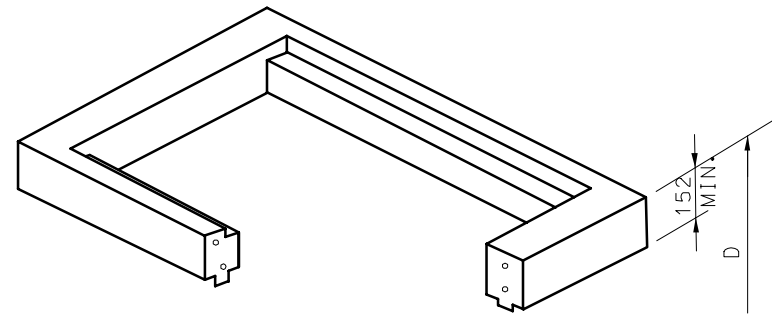
NO DIRECT PAYMENT WILL BE MADE FOR INLET STEPS.

STEPS ARE NOT REQUIRED FOR TYPE D INLETS.

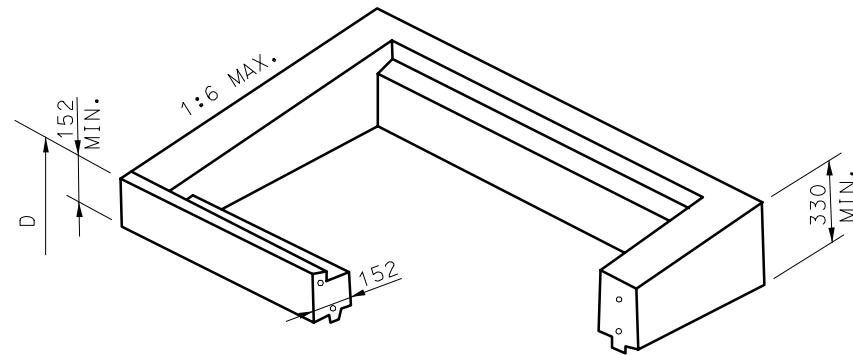
GENERAL NOTES:

ALL DIMENSIONS SHOWN ARE IN mm UNLESS OTHERWISE NOTED.

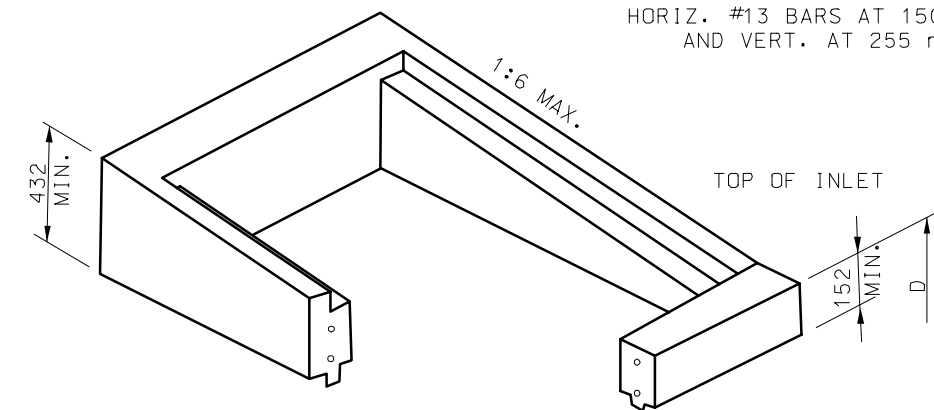
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION			
PRECAST DROP INLET			
DATE: _____	EFFECTIVE: 12-01-2005	M731.10R	1/8



TYPE S-1



TYPE S-2

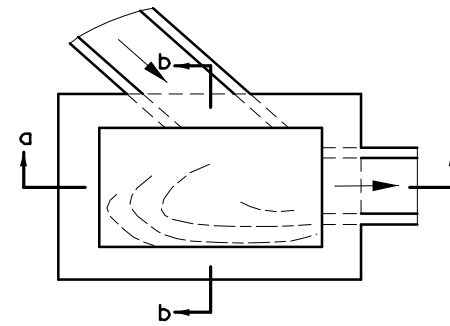


TYPE S-3

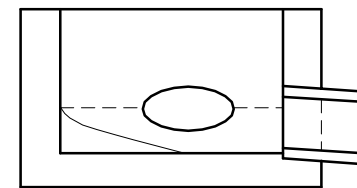
HORIZ. #13 BARS AT 150 mm CTRS.  
AND VERT. AT 255 mm CTRS.

SEE STANDARD PLAN 614.10 FOR GRATES AND BEARING  
PLATES. TYPICAL LOCATION DETAILS ARE INDICATED  
ON SHEETS 7 AND 8 OF 8. TOP SECTIONS MAY BE CAST  
MONOLITHIC WITH BASE SECTION.

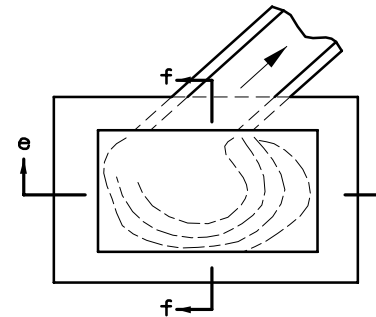
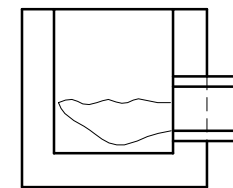
DROP INLET		
WIDTH mm x mm	LENGTH mm x mm	TYPE
610 x 610		A, B, C
1219 x 610		
610 x 610		D
914 x 610		E, S-1 S-2, S-3
914 x 914		
1524 x 610		
1524 x 914		



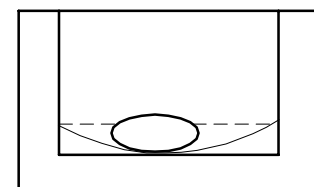
SECTION a-a



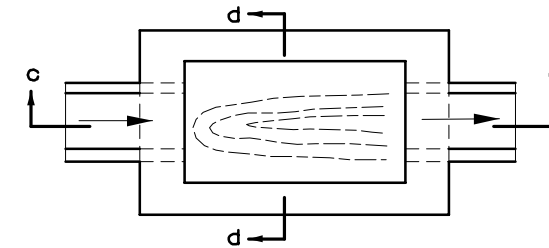
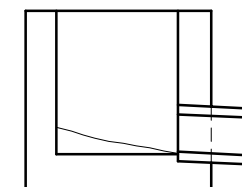
SECTION b-b



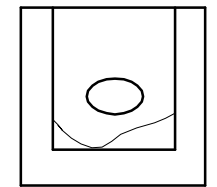
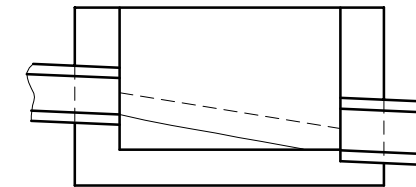
SECTION e-e



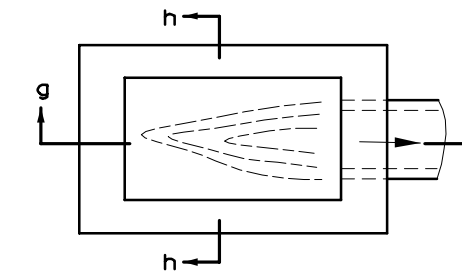
SECTION f-f



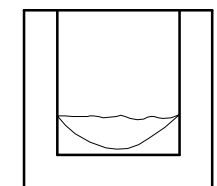
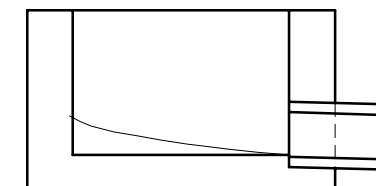
SECTION c-c



SECTION d-d



SECTION g-g



SECTION h-h

## TYPICAL INVERTS

GENERAL NOTES:

ALL DIMENSIONS SHOWN ARE IN mm UNLESS OTHERWISE NOTED.

THE CONCRETE FOR INVERTS SHALL BE PLACED AFTER COM-  
PLETION OF THE DROP INLET BOX. NO DIRECT PAYMENT WILL  
BE MADE FOR FURNISHING OR PLACING INVERT CONCRETE.

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COMMISSION

## PRECAST DROP INLET

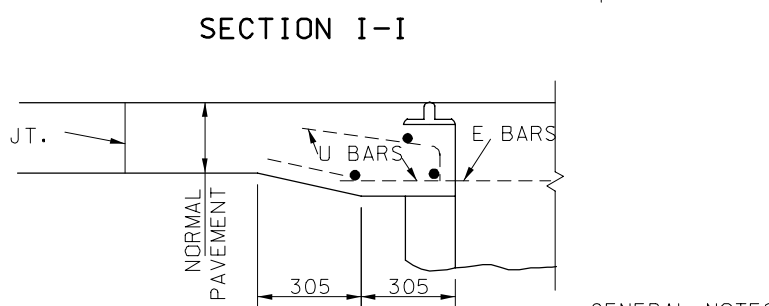
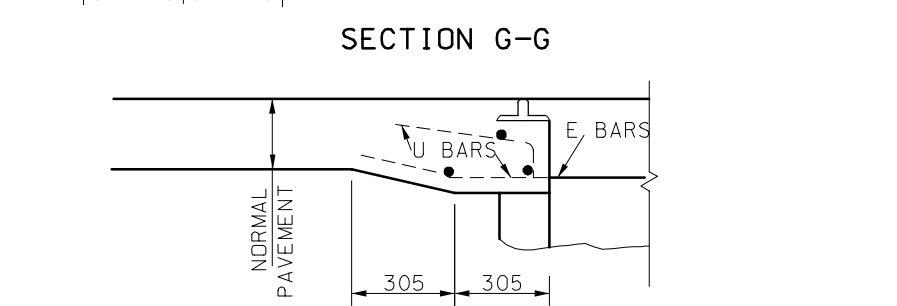
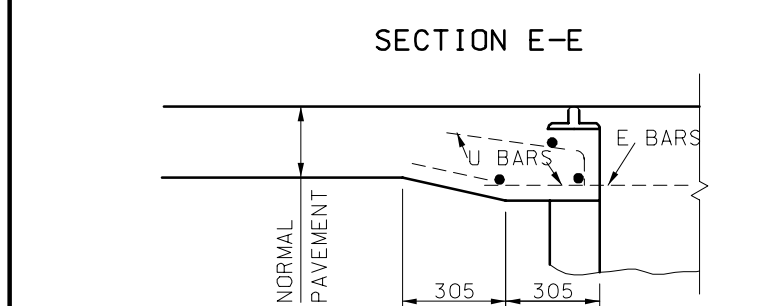
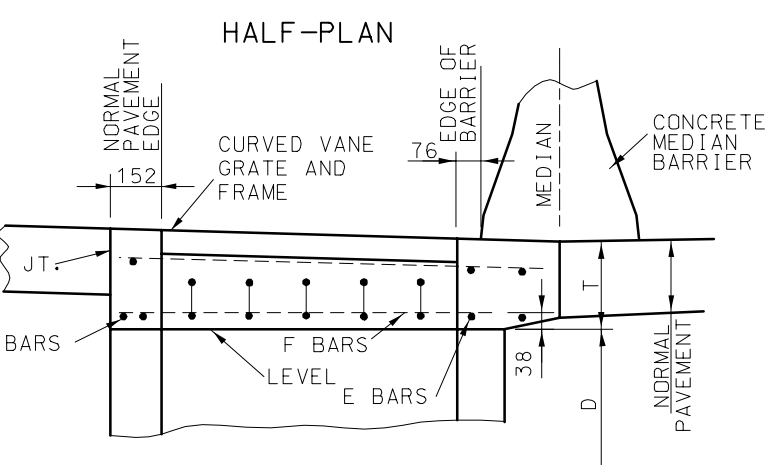
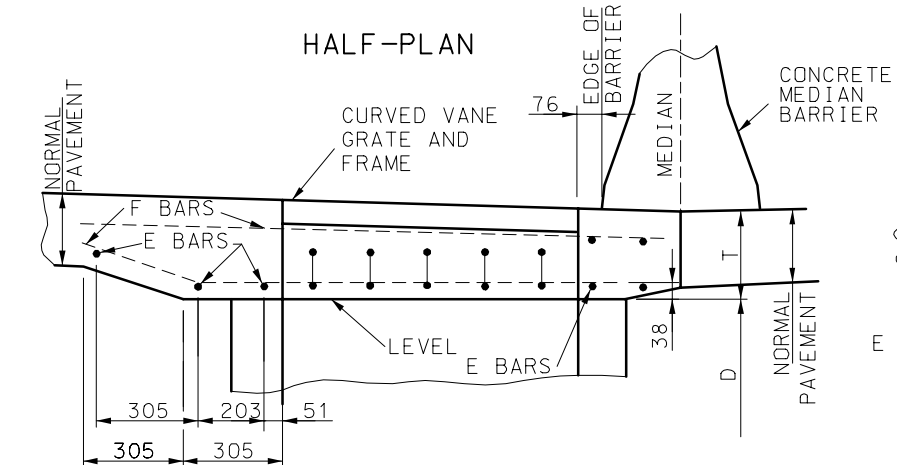
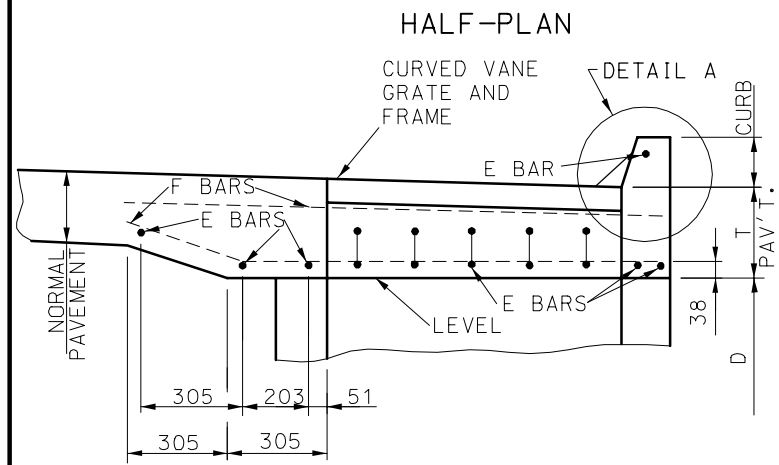
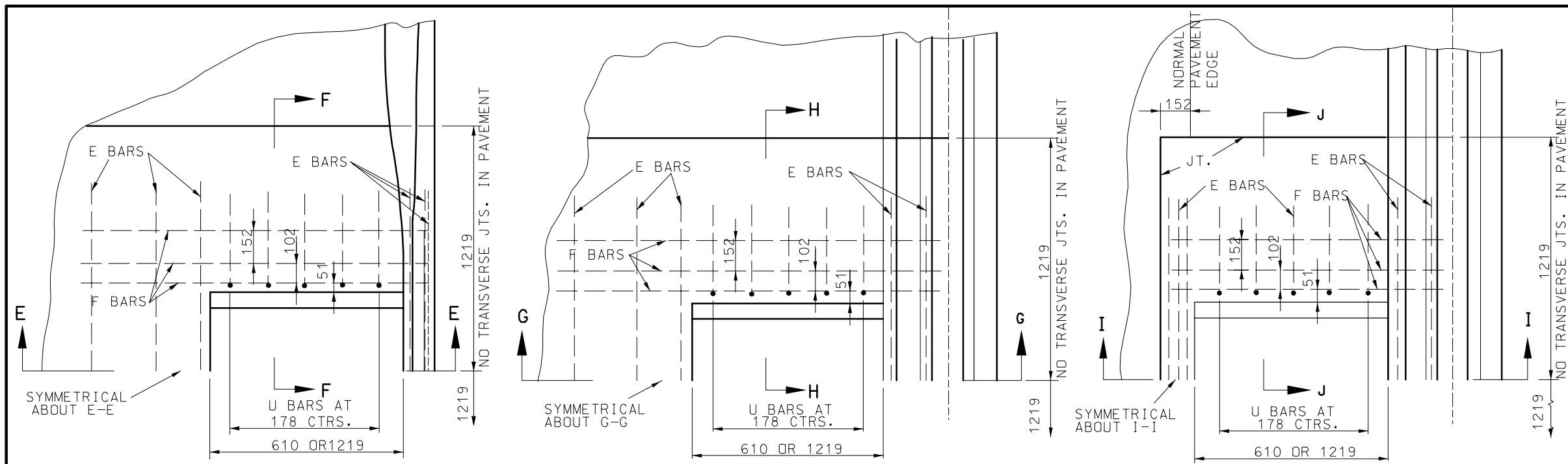
DATE: \_\_\_\_\_

EFFECTIVE: 12-01-2005

M731.10R

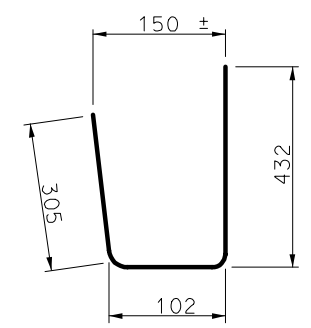
2

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PAVEMENT BAR BILL					
TYPE	WIDTH	LENGTH	MARK	NO.	LENGTH mm
A	1219	610	E	6	1829
			F	6	1981
			U	14	838
	610	610	E	6	1829
			F	6	1372
			U	8	838
B	1219	610	E	7	1829
			F	6	2134
			U	14	838
	610	610	E	7	1829
			F	6	1524
			U	8	838
C	1219	610	E	7	1829
			F	6	1600
			U	14	838
	610	610	E	7	1829
			F	6	991
			U	8	838
D	610	610	E	6	2134
			F	6	838
			U	8	838

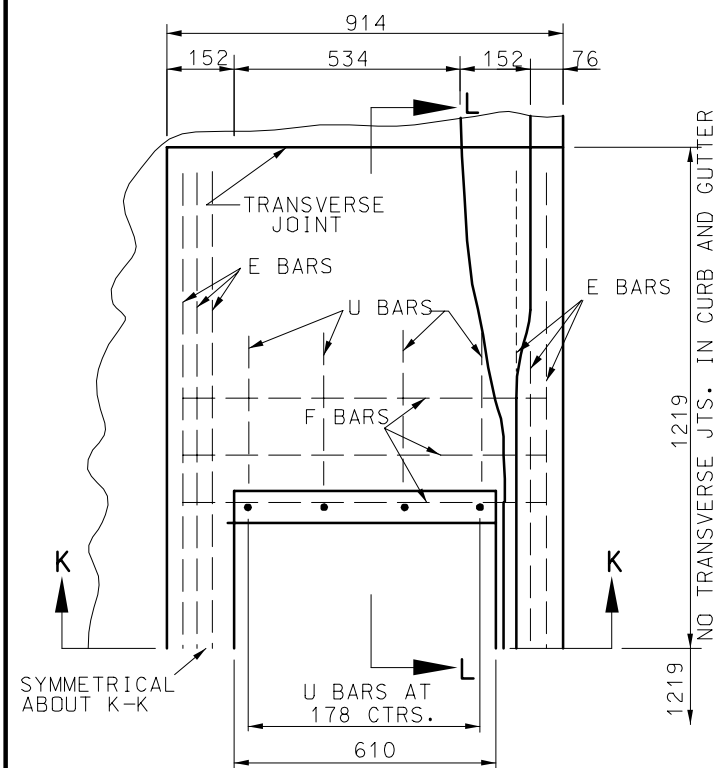
BARS E, F, & U.....#13



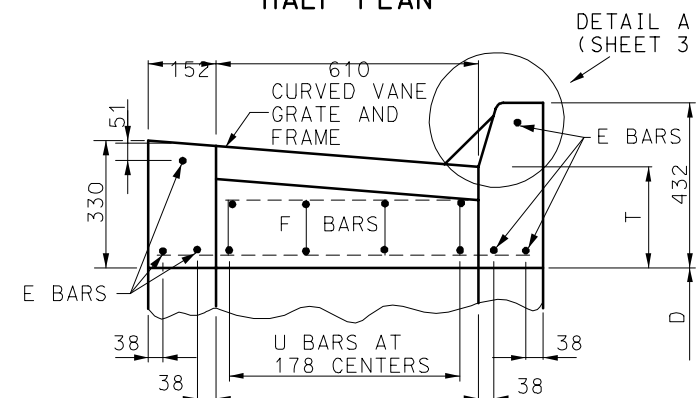
U-BARS BENDING DIAGRAM

GENERAL NOTES:  
ALL DIMENSIONS SHOWN ARE IN mm UNLESS OTHERWISE NOTED.  
SEE STANDARD PLAN M614.11 FOR CURVED VANE GRATE.

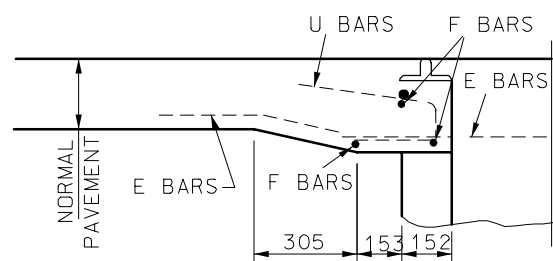
MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION			
PRECAST DROP INLET COVERS			
DATE: _____	EFFECTIVE: 12-01-2005	M731.10R	3/8



HALF-PLAN

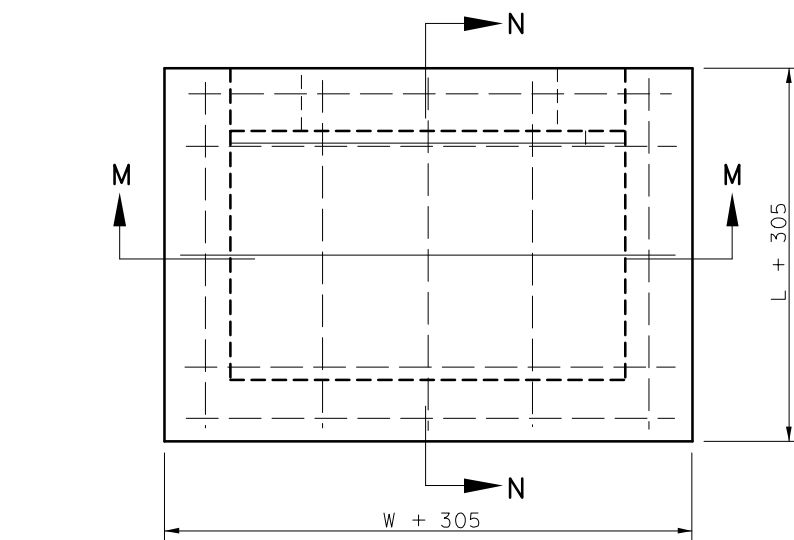


SECTION K-K

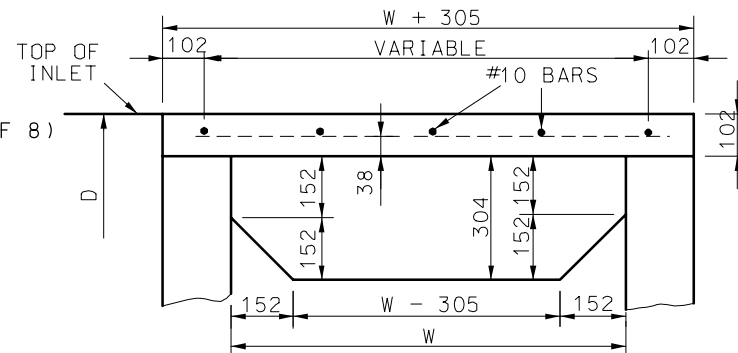


HALF SECTION L-L

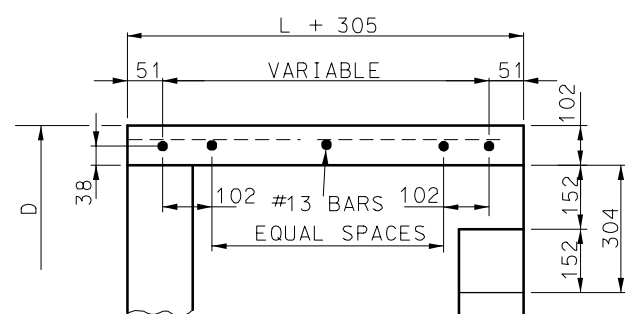
TYPE D  
CURB & GUTTER



PLAN



SECTION M-M



SECTION N-N

TYPE E  
PRECAST SLAB

PAVEMENT THICKNESS	"T" DIMENSION
LESS THAN OR EQUAL TO 275	275
300	300
325	325
GREATER THAN OR EQUAL TO 350	350

TYPE E COVER BAR BILL				
WIDTH	LENGTH	BAR SIZE	NO.	LENGTH mm
914	610	#10	5	838
		#13	5	1143
914	914	#10	5	1143
		#13	5	1143
1524	610	#10	6	838
		#13	6	1753
1524	914	#10	6	1143
		#13	7	1753

#### GENERAL NOTES:

ALL DIMENSIONS SHOWN ARE IN mm UNLESS OTHERWISE NOTED.

THE SIZE OF THE DROP INLET AND TYPE OF COVER WILL BE SHOWN ON THE PLANS.

THE CONFIGURATION DETAILS SHOWN ARE DESCRIPTIVE ONLY AND MAY BE VARIED TO CONFORM WITH ESTABLISHED MANUFACTURING PROCEDURES.

TOP OF DROP INLET WALL SHALL BE CONSTRUCTED TO THE ELEVATION OF BOTTOM OF SLAB AT THE EDGE OF PAVEMENT OR BOTTOM OF CURB AND GUTTER AT DROP INLET.

WHERE THE DROP INLET IS LOCATED IN AN UNPAVED AREA, THE TOP OF THE DROP INLET WALLS SHALL BE SET TO THE ELEVATION SHOWN ON THE PLANS.

ALL CONCRETE ABOVE THE TAR PAPER SEARATION JOINT IS TO BE CONSTRUCTED DURING PAVING OPERATIONS OR CURB AND GUTTER CONSTRUCTION, AND WILL BE PAID FOR AS SQUARE METERS OF CONCRETE PAVEMENT OR LINEAR FEET OF CURB AND GUTTER.

FORMED OR CUT-OUT OPENINGS SHALL BE PROVIDED WHERE PIPE INLETS AND OUTLETS ARE SHOWN ON THE PLANS.

REINFORCING BARS IN PAVEMENT SHALL BE EPOXY COATED AND SECURELY TIED TOGETHER AND FASTENED TO AVOID ANY POSSIBLE DISPLACEMENT DURING THE PLACING OF CONCRETE. REINFORCEMENT SHOWN IS IN ADDITION TO ANY REINFORCEMENT SHOWN FOR CONCRETE PAVEMENT OR CURB AND GUTTER.

JOINTS SHALL BE SEALED IN ACCORDANCE WITH SECTION 726.3.1 OF THE STANDARD SPECIFICATIONS.

THE CONTRACTOR WILL BE PERMITTED TO CAST IN PLACE THE DROP INLETS CALLED FOR IN THE PLANS, TO THE DIMENSIONS REQUIRED FOR PRECAST DROP INLETS.

WELDED WIRE FABRIC MAY BE IN LIEU OF REINFORCING BARS, THE REINFORCEMENT SHALL NOT BE LESS THAN 0.49 mm<sup>2</sup>/mm BOTH HORIZONTALLY AND VERTICALLY.

NO DIRECT PAYMENT WILL BE MADE FOR REINFORCING STEEL.

NO DIRECT PAYMENT WILL BE MADE FOR CUTTING PIPE NOR FOR CUTTING OR BENDING REINFORCING STEEL.

THE TOP OF INLET PIPES SHALL NOT BE SET BELOW THE TOP OF THE OUTLET PIPE.

NO DIRECT PAYMENT WILL BE MADE FOR FORMING FOR CURVED VANE FRAMES AND GRATES.

THE REINFORCEMENT SHOWN IS THE MINIMUM REQUIRED. AT THE CONTRACTOR'S OPTION, ADDITIONAL REINFORCEMENT MAY BE USED.

REINFORCING STEEL EDGE DISTANCE WILL BE 38 mm UNLESS OTHERWISE SPECIFIED.

NOT MORE THEN TWO LIFT HOLES OR LIFTING INSERTS MAY BE PROVIDED.

CLASS 3 EXCAVATION WILL BE PAID WITHIN VERTICAL PLANES 450 mm OUTSIDE OF THE OUTER WALLS OF THE BASE SECTION OF THE DROP INLETS, CLASS 3 EXCAVATION WILL NOT BE PAID FOR OUTSIDE THE FOOTING LIMITS.

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## PRECAST DROP INLET COVERS

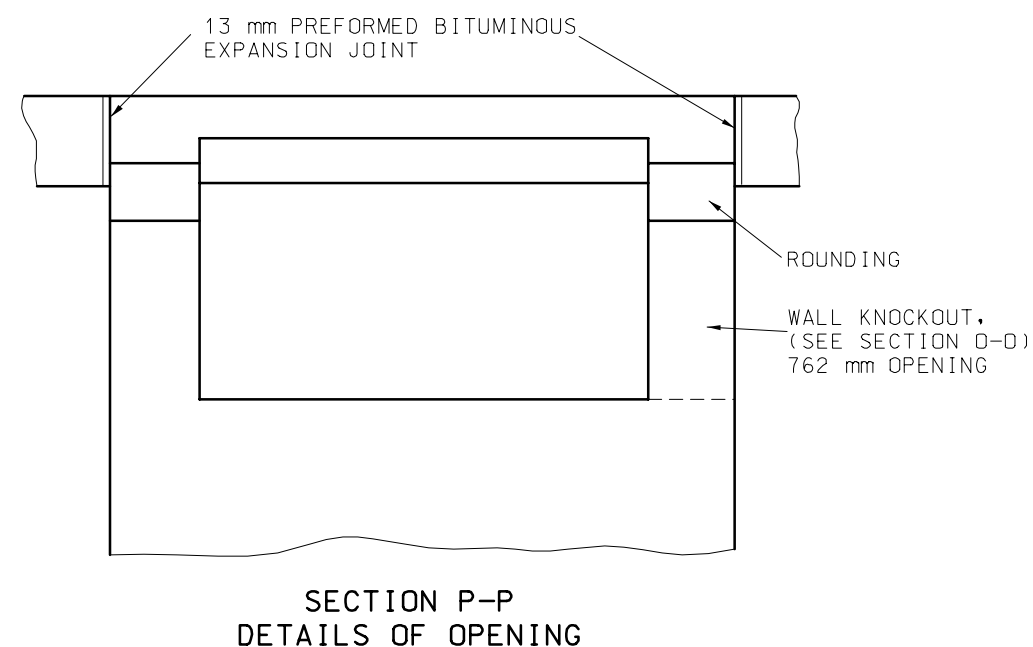
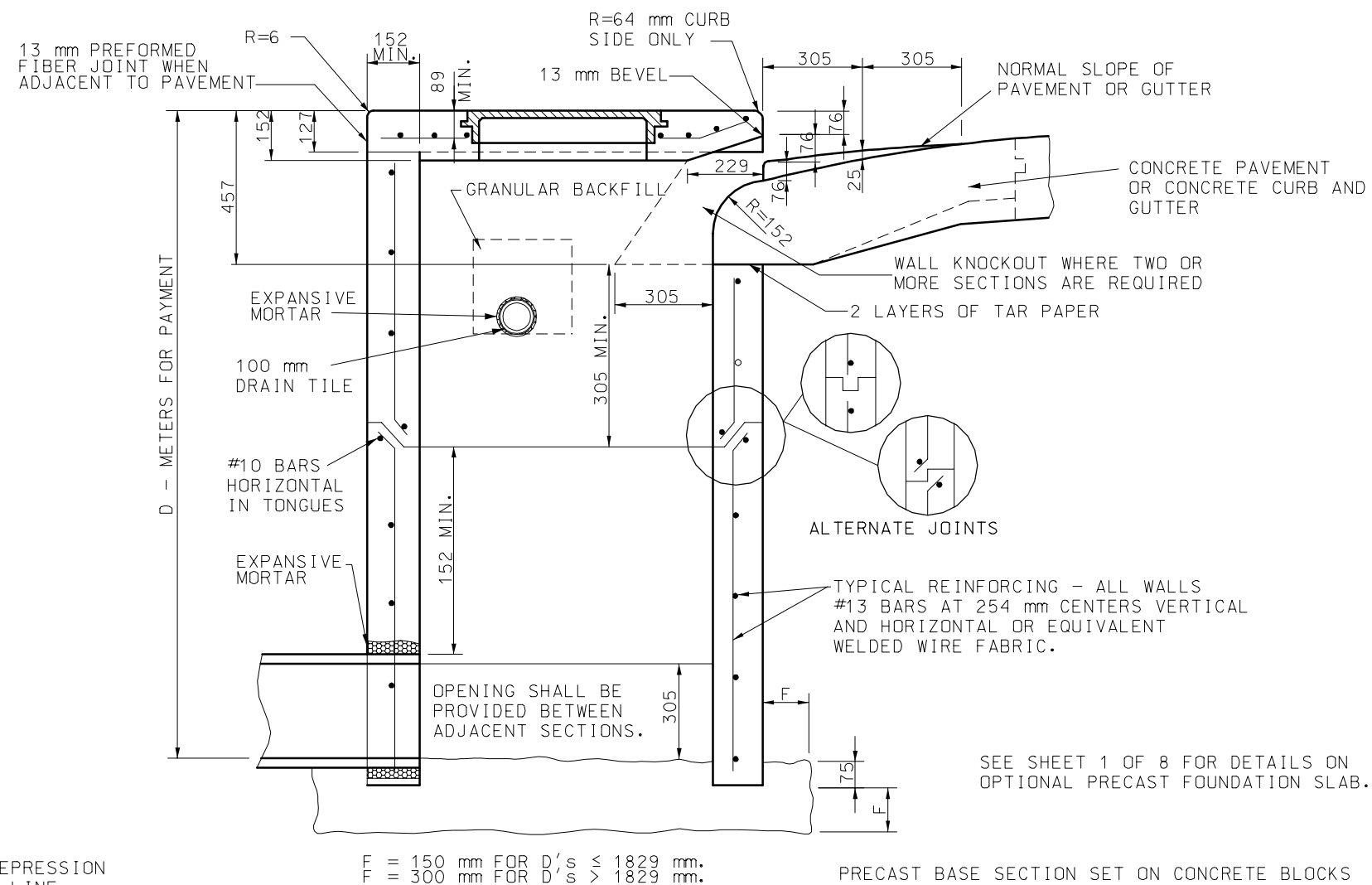
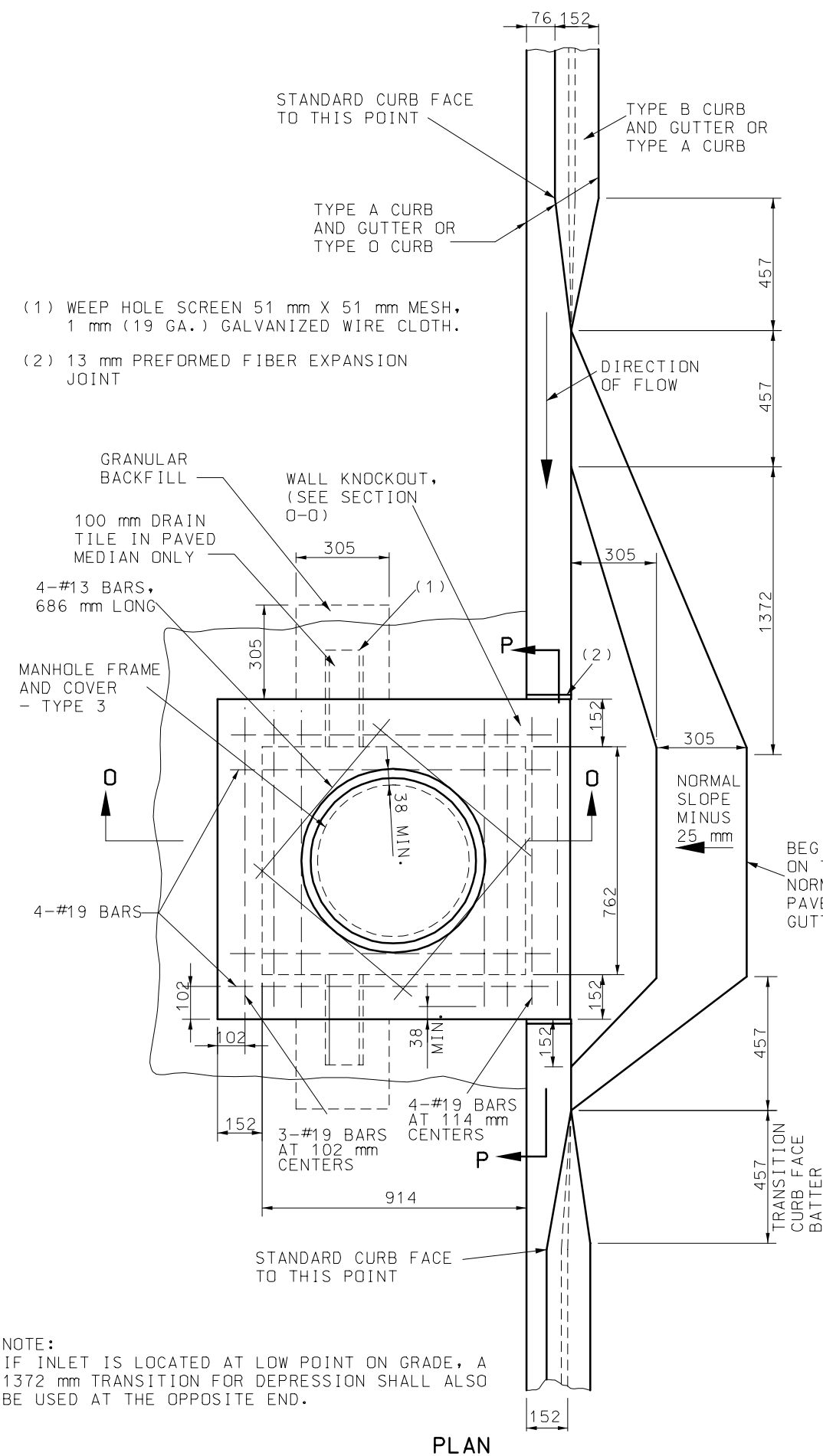
DATE: \_\_\_\_\_

EFFECTIVE: 12-01-2005

**M731.10R**

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GENERAL NOTES:

ALL DIMENSIONS SHOWN ARE IN mm UNLESS OTHERWISE NOTED.

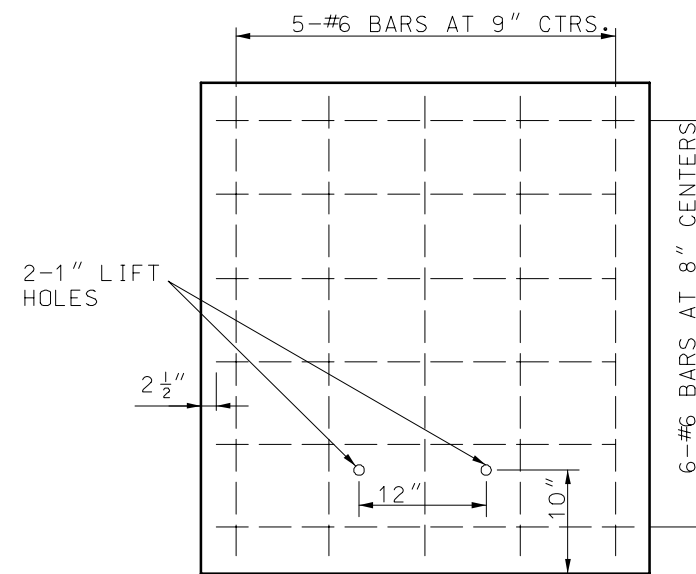
MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION

**PRECAST DROP INLET**  
CURB INLET - TYPE T

DATE: _____	EFFECTIVE: 12-01-2005
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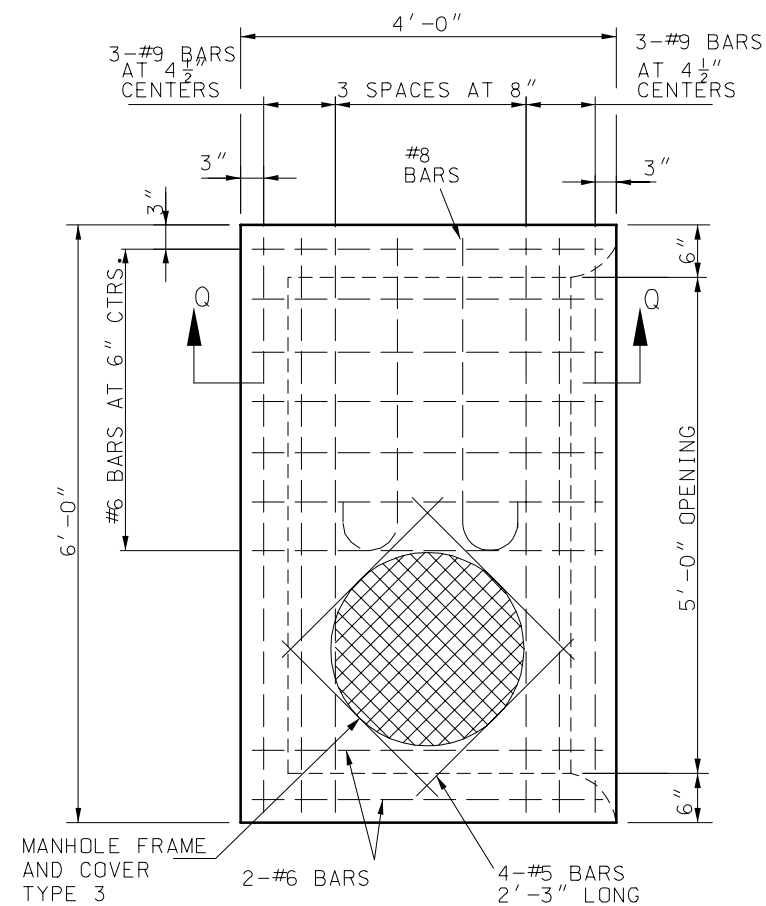
M731.10R

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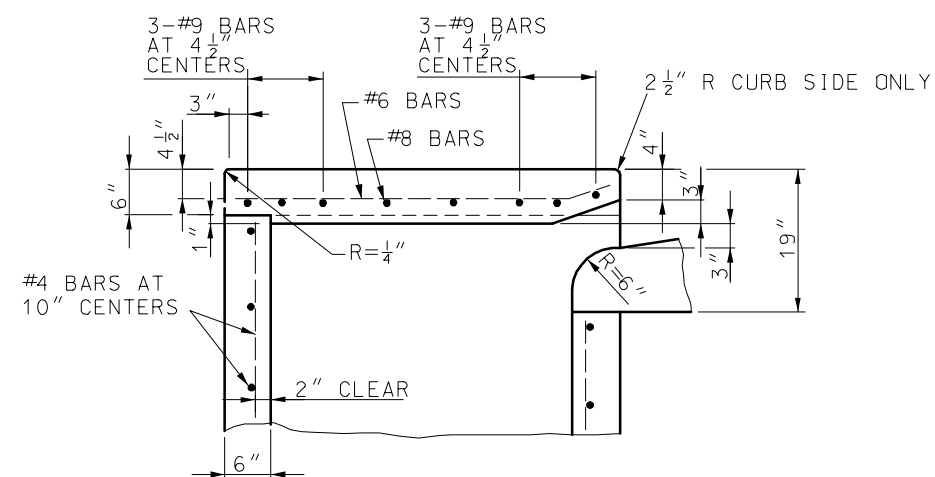


NOTE:  
REINFORCING FOR LIDS ON UPSTREAM SECTIONS.

## LID FOR ADJACENT SECTIONS



PLAN



SECTION Q-Q

## OPTIONAL PRECAST CURB INLET 5'-0" OPENING

OTHER DETAILS ARE THE SAME AS  
FOR THE 2'-6" OPENING  
DROP INLET THIS SHEET.

### GENERAL NOTES:

#### NOTES PERTAINING TO TYPE T:

THE LENGTH AND DEPTH OF THE INLET SHALL BE AS SHOWN ON THE PLANS.

WALLS BETWEEN THE ADJACENT SECTIONS SHALL BE SEALED IN ACCORDANCE WITH SECTION 726.3.1 OF THE STANDARD SPECIFICATIONS.

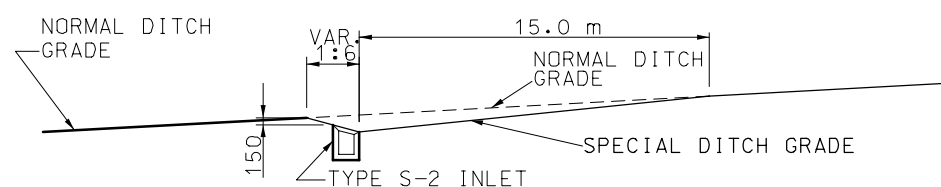
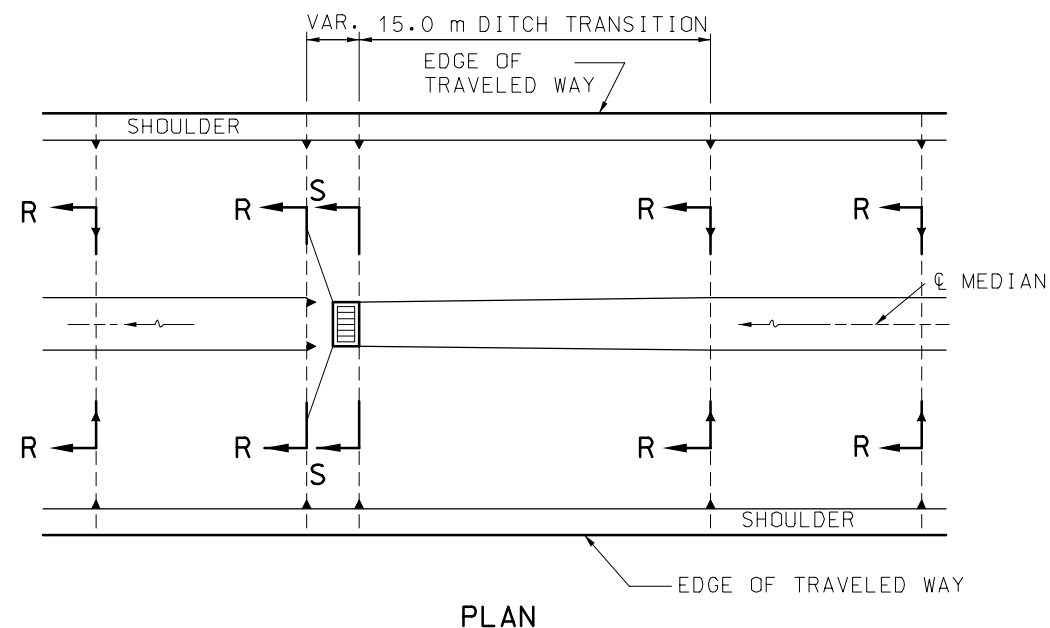
IF DEPTH OF INLET EXCEEDS 6 FEET THE PRECAST UNITS MAY BE FURNISHED IN TWO OR MORE SECTIONS.

IF TWO OR MORE SECTIONS ARE USED, THE TYPE 3 MANHOLE FRAME AND COVER SHALL BE IN THE DOWNSTREAM SECTION ONLY.

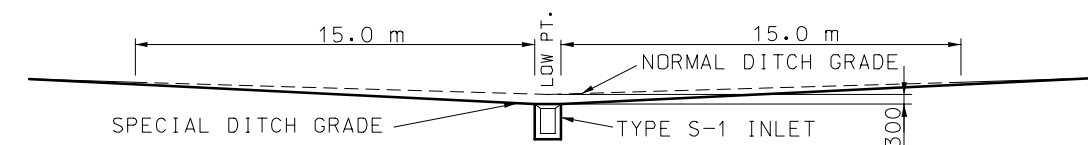
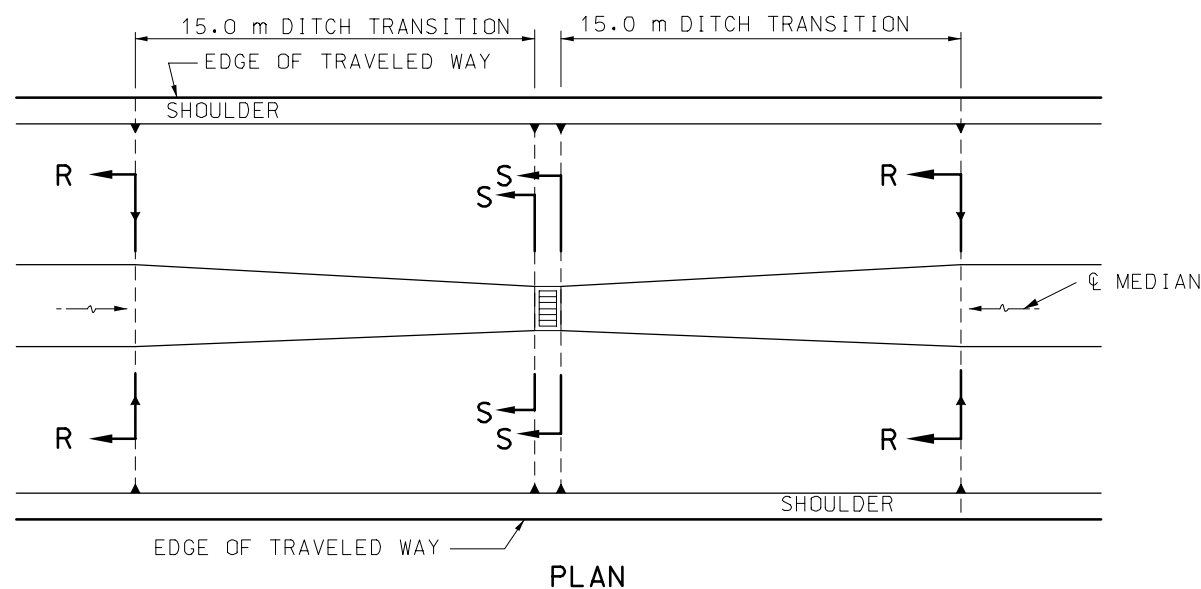
IF A 5 FOOT OPENING IS REQUIRED, TWO 2'-6" OPENING SECTIONS OR ONE 5 FOOT OPENING SECTION MAY BE PROVIDED AT THE CONTRACTOR'S OPTION.

SEE SHEET 1 FOR STEP DETAILS AND SHEET 4 FOR GENERAL NOTES.

MISSOURI HIGHWAYS AND TRANSPORTATION COMMISSION			
		<b>PRECAST DROP INLET CURB INLET - TYPE T</b>	
DATE: _____	EFFECTIVE: 12-01-2005	<b>731.10R</b>	6 8

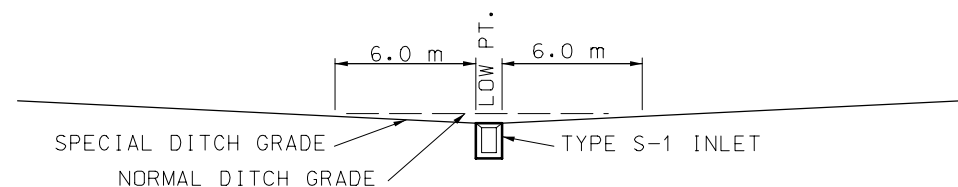
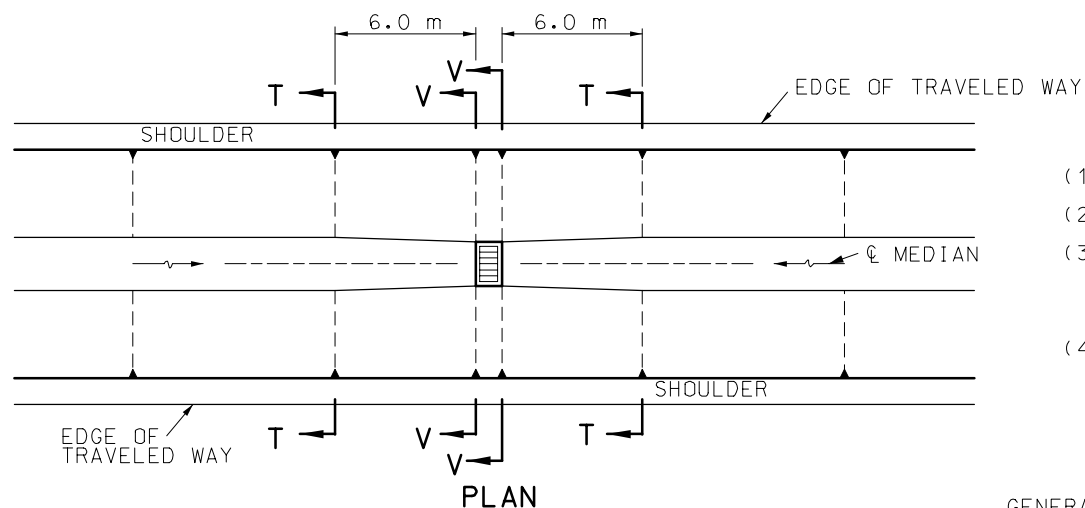
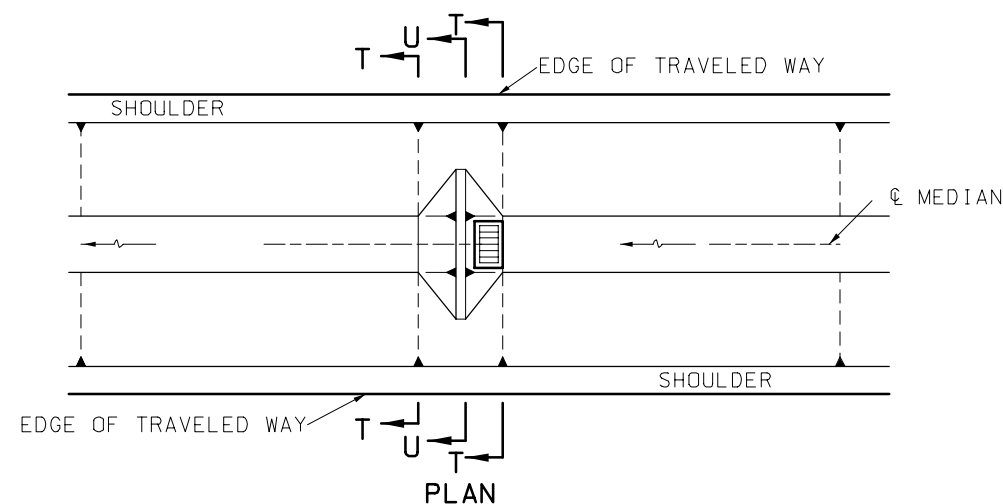


SECTION ALONG CENTERLINE OF MEDIAN RELIEF ON GRADE



SECTION ALONG CENTERLINE OF MEDIAN RELIEF AT LOW POINT

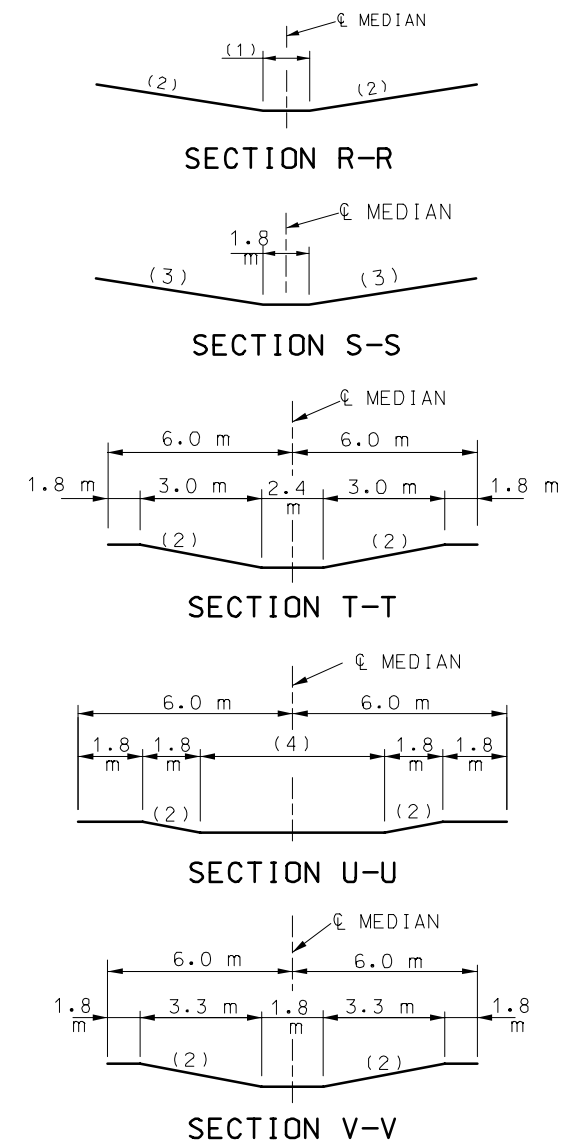
### DETAILS FOR MEDIAN RELIEF-18.0 m MEDIAN



SECTION ALONG CENTERLINE OF MEDIAN RELIEF ON GRADE

SECTION ALONG CENTERLINE OF MEDIAN RELEIF AT LOW POINT

### DETAILS FOR MEDIAN RELIEF-12.0 m MEDIAN



- (1) DITCH WIDTH AS GIVEN ON TYPICAL SECTION.
- (2) DITCH SLOPE AS GIVEN ON TYPICAL SECTION.
- (3) VARY SLOPE TO ACHIEVE MINIMUM 150 mm FREEBOARD ABOVE TOP OF INLET GRATE ON GRADE, OR 300 mm ADDITIONAL DITCH DEPTH BELOW NORMAL DITCH GRADE AT LOW POINT.
- (4) VARY WIDTH TO ACHIEVE MINIMUM 150 mm FREEBOARD ABOVE TOP OF INLET GRATE.

GENERAL NOTES:

ALL DIMENSIONS SHOWN ARE IN mm UNLESS OTHERWISE NOTED.

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**PRECAST DROP INLET**  
TYPICAL LOCATION DETAILS  
- TYPE S

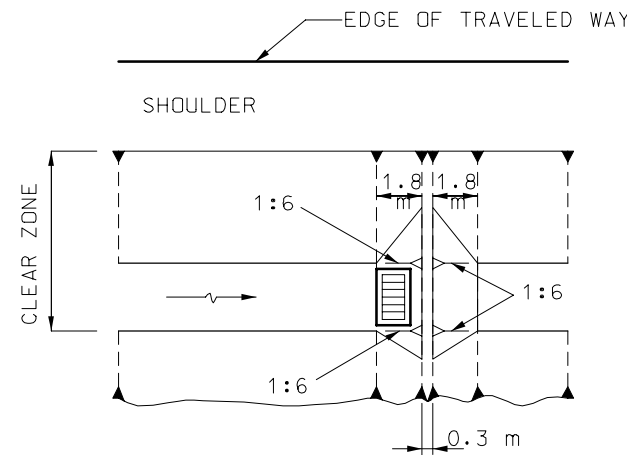
DATE: \_\_\_\_\_

EFFECTIVE: 12-01-2005

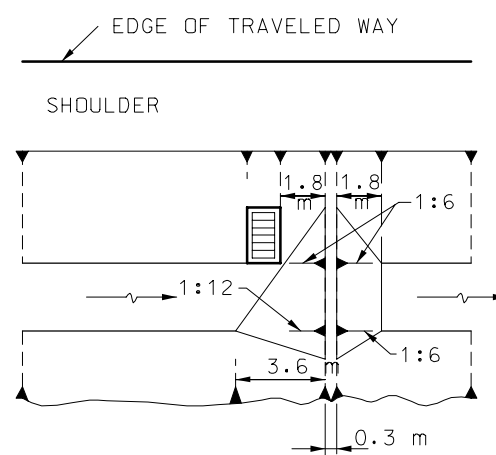
**M731.10R**

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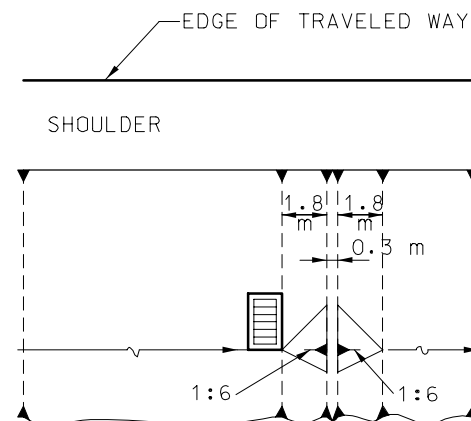
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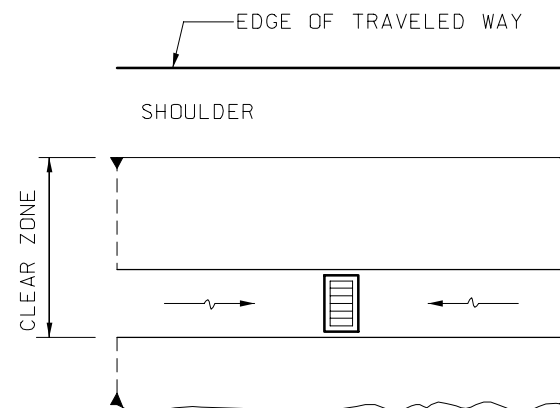
**PLAN 1**  
TYPE S-2 INLET IN ROADWAY DITCH  
(FLAT DITCH ON GRADE)



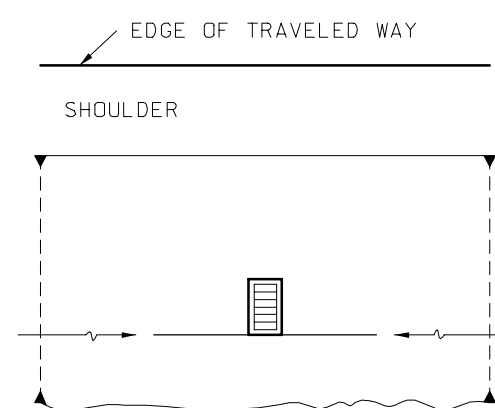
**PLAN 2**  
TYPE S-3 INLET IN ROADWAY DITCH  
(FLAT DITCH ON GRADE)



**PLAN 3**  
TYPE S-3 INLET IN ROADWAY DITCH  
(V DITCH ON GRADE)



**PLAN 4**  
TYPE S-1 INLET AT LOW POINT  
(FLAT DITCH)



**PLAN 5**  
TYPE S-3 INLET AT LOW POINT  
(LOW DITCH)

## DETAILS FOR ROADWAY DITCH INLETS LOCATED WITHIN THE CLEAR ZONE

### GENERAL NOTES:

ALL DIMENSIONS SHOWN ARE IN mm UNLESS OTHERWISE NOTED.

THIS DRAWING IS FOR GENERAL INFORMATION ONLY. ACTUAL CONSTRUCTION DETAILS SHALL CONFORM TO THOSE SHOWN ON THE DETAIL PLANS.

DETAILS ON THIS SHEET ARE ONLY FOR USE WITH STRUCTURES LOCATED IN THE MEDIAN OR WITHIN THE CLEAR ZONE.

MISSOURI HIGHWAYS AND TRANSPORTATION  
COMMISSION

## PRECAST DROP INLET TYPICAL LOCATION DETAILS - TYPE S

DATE: \_\_\_\_\_

EFFECTIVE: 12-01-2005

**M731.10R**

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